

REMARKS

Claims 1-15 are all the claims pending in the application. Of these, claims 8-13 are withdrawn.

I. Response to Obviousness-Type Double Patenting Rejections

A. App. Ser. No. 10//123,113 (U.S. Patent No. 7,214,424)

Claims 1-7 and 14 and 15 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-2, 5-6 and 9-10 of U.S. Patent No. 7,214,424.

Applicants respectfully traverse the rejection and submit that the present invention is not an obvious variant of the subject matter of the issued claims of the '424 patent. Specifically, a characteristic feature of the present invention is that "the heat-expandable pressure-sensitive adhesive layer (b) and the substrate (a) are peelable from each other by heating". This feature is not recited in the claims of the issued '424 patent and there is no motivation for one of ordinary skill in the art to modify the subject matter of the claims of the '424 patent.

As can be seen from the disclosure of the '424 patent there is no concept of peeling the heat-peelable pressure-sensitive adhesive layer from the substrate. This is also evidenced by the description at column 7, lines 38-40, in the '424 patent. According to this description, the undercoating layer is preferably formed on the substrate in order to improve the adhesiveness of the substrate to the heat-expandable layer. Thus, the '424 patent teaches away from the present invention and present invention is not an obvious variant of the claims of the '424 patent.

Accordingly, Applicants respectfully request withdrawal of the obviousness-type double patenting rejection.

B. App. Ser. No. 10/415,948

Claims 1-7, 14 and 15 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-5 of co-pending Application No. 10/415,948 (US 2004/0038020).

Applicants respectfully defer responding to the provisional obviousness-type double patenting rejection.

II. Response to Claim Rejection under 35 U.S.C. § 102

In paragraph 11, claims 1-7, 14 and 15 are rejected under 35 U.S.C. § 102(b) over Kiuchi. Applicants respectfully traverse the rejection.

The present invention is directed to a heat-peelable double-faced pressure-sensitive adhesive sheet consisting essentially of a substrate (a), a heat-peelable pressure-sensitive adhesive layer (b) formed on one side of the substrate (a) and containing heat-expandable microspheres, and a pressure-sensitive adhesive layer (c) formed on the other side of the substrate (a), wherein the heat peelable pressure-sensitive adhesive layer (b) and the substrate (a) are peelable from each other by heating.

The present invention is characterized in that peeling occurs between the substrate and the heat-peelable pressure-sensitive adhesive layer (heat-expandable layer). In this connection it is submitted that the adhesive layer (b) of the adhesive sheet of the present invention may be formed by, for example, a method in which a mixture comprising heat-expandable microspheres and a pressure-sensitive adhesive is applied to the substrate (a). Alternatively, a method may be employed in which the mixture is applied to an appropriate separator to form the adhesive layer (b), which is then transferred to the substrate (a). Preferably, the side of the substrate (a) on

which the adhesive layer is applied may have undergone a releasability-imparting treatment prior to the application of the adhesive layer (specification page 6, lines 22 to 24). This results in the formation of an adhesive sheet in accordance with claim 1 of the present invention, consisting essentially of an adhesive layer (b) and a substrate (a) which are peelable from each other by heating. Consequently, the adhesive layer and the substrate of the adhesive sheet are separated from each other by heating.

On the other hand, Figure 2 of Kiuchi depicts a substrate 1 with a heat-expandable adhesive layer 2 on one side and an adhesive layer 4 on the other side. The Examiner asserts that Kiuchi discloses the same structure encompassed by the present claims and Applicants have not provided a sufficient showing as to why the pressure-sensitive layer would not be peelable from the substrate in the presence of a large amount of heat

However, as previously pointed out, the disclosure of Kiuchi relied upon by the Examiner does not support the Examiner's position. That is, in [0047] of EP '002, Kiuchi discloses that:

Furthermore, since the adhesive sheet has a heat-expandable layer containing heat-expandable microspheres, the heat-expandable microspheres are promptly foamed or expanded by a heat treatment and the heat-expandable layer changes in volume to form a three-dimensional structure with a rough surface. Consequently, the area in which the adhesive layer is adherent to the cut pieces 7 resulting from the cutting decreases considerably, and the adhesive strength hence decreases greatly... As a result, the operating efficiency and working efficiency in the step of separating and recovering the cut pieces 7 are greatly improved.

Thus, this disclosure teaches separation between an adherend and the heat-expandable adhesive layer, not separation between the heat-expandable adhesive layer and the substrate.

Additionally, at lines 8 to 16 in the paragraph [0047] of Kiuchi, it is described that the surface smoothness of the adhesive sheet can be maintained since the substrate has a heat resistance, and it is also described that the space between the cut pieces can be easily enlarged to

a desired degree by stretching the adhesive sheet since the substrate has a stretchability.

Accordingly, it is clear that, in Kiuchi, the substrate is still a part of the adhesive sheet and is not peeled from the heat-expandable adhesive layer even after the heat treatment. If the heat-expandable adhesive layer was peeled from the substrate in Kiuchi, the effect of maintaining the surface smoothness of the adhesive sheet cannot be achieved and it is also impossible to enlarge the space between the cut pieces by stretching the adhesive sheet (due to the stretchability of the substrate). Accordingly, it is clear that if the heat-expandable adhesive layer separated from the substrate in Kiuchi, the invention of Kiuchi would not be operative. Thus, Kiuchi does not anticipate the present invention

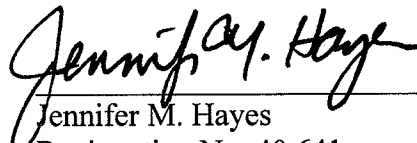
Accordingly, Applicants respectfully request withdrawal of the rejection.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


Jennifer M. Hayes
Registration No. 40,641

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/265550

65565

CUSTOMER NUMBER

Date: February 14, 2008